EXAMPLE

CF-SR- Solar Water Heating Calculation Form   **OG-300**

Property Name: _____   Building Type: (Single Family, Multi-family): <u>Single Family_____</u>

Total Conditioned Floor Area (CFA)ft^2 : ____2500_____   Climate zone (1-16): ___2_____

INPUTS FOR SYSTEMS SRCC OG-300:

1.	Enter Solar Energy Factor of OG-300 solar water heating system as listed in SRCC directory	3.4
2.	Enter Energy Factor of Water Heater (enter .6 for gas .9 for electric)	0.9
3.	Constant - 41045 (amount of energy used in SRCC test)	41045
4.	Constant - 3500 average parasitic loss value in SRCC test	3500
5.	Gallons per day use value calculated as: (21.5*.0014*CFA)	75.25
6.	Constant – 64.3 gallons used in SRCC test method	64.3
7.	Hot water supply temperature 135 degrees	135
8.	Environmental temperature (Enter value from Table 1 based on Climate Zone)	57.52
9.	Difference in supply and inlet water (subtract line 9 from line 8)	77.48
10.	Constant - 1500 Solar radiation value used in SRCC test	1500
11.	Solar radiation level from Table 1below	1220
12.	Energy for circulation. (enter 0.9 of forced re-circulation and 1 for all other systems)	0.9

CALCULATION FOR SYSTEM

13.	Multiply line 2 by line 3	36940.5
14.	Divide by line 13 by line 1	10864.9
15.	Divide line 5 by line 6	1.2
16.	Divide the result in line 9 by 77	1.0
17.	Subtract 1 by line 2	0.1
18.	Multiply lines 14, 15 and 16	12384.8
19.	Multiply line 4 by line 5 by line 17	350.0
20.	Add line 18 to line 19	12734.8
21.	Divide line 20 by line 3	0.3
22.	Divide line 10 by line 11	1.2
23.	Multiply line 21 by line 22 divide by line 12	0.3
24.	Subtract 1 by line 23	0.4
	Solar Fraction	**0.4**